UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

SEP 1 1994

REPLY TO THE ATTENTION OF

HSE-5J

ACTION MEMORANDUM

DATE:

SUBJECT: Request for a Twelve Month and $2 Million Dollar Exemption for the Time Critical Removal Action at the Standard Scrap/Chicago International Exporting Site in Chicago, Illinois, Cook County, Site (Site ID# HQ)

FROM: Steven J. Faryan, On-Scene Coordinator
Emergency Response Section II

THRU: William E. Muno, Director
Waste Management Division

TO: Valdas V. Adamkus
Regional Administrator

I. PURPOSE

The purpose of this Action Memorandum is to request and document approval of the proposed time critical removal action and to request a Twelve Month and $2 Million Statutory Exemption described herein for the Standard Scrap/Chicago International Exporting (CIE) Site located at 4020 S. Wentworth Ave., in Chicago, Illinois, 60609, Latitude 87 37' 55" north, Longitude 41 52' 50". The twelve digit CERCLIS ID # is ILD045698263. The site is an environmental justice candidate site and is located adjacent to a highly populated residential area on the South side of Chicago. It is estimated that the removal action will take six months and cost up to $4,497,350.

II. SITE CONDITIONS AND BACKGROUND

The Standard Scrap/Chicago International Exporting Site is an active 3-acre scrap yard that reclaims copper and other scrap metal from electric motors. Past and present operations have been active on two distinct parcels of property separated by Wells Street. The East lot is approximately 2.5 acres and the West lot is approximately .5 acres. The West lot contains the active shredding and metals separation operations and the East lot contains a scale for weighing incoming and outgoing trucks.

The Standard Scrap Metal Company was started in 1928 by Sam Cohen and Sam Kanter at 4004 South Wentworth Ave., and was involved in reclaiming scrap metal. The facility contained one gas-fired boiler, two aluminum sweat furnaces, and a wire burning incinerator. The company went bankrupt in 1987, changed names to Phoenix Recycling and continued in the metal reclamation business. The Phoenix Recycling business was owned by Sam Cohen, Sam Kanter and Benjamin Kanter.

On February 14, 1984, IEPA investigated the Standard Scrap facility and analytical results indicated levels of PCBs up to 1,300 ppm in soils in the west lot. The IEPA requested that the U.S. EPA conduct a PCB inspection at the site.

On March 30,1984, U.S. EPA's TSCA office conducted an inspection of the facility and analytical results confirmed PCB levels up to 2,095 ppm and the facility was fined $25,000 for violating regulations pertaining to the improper disposal of PCB's.

On June 18, 1985 the U.S. EPA Technical Assistance Team collected four soil samples and two wipe samples from the east lot at the Site. The analytical results indicated PCB levels up to 336 ppm in three soil samples, and isomers of dioxin were detected in all four soil samples. The inspection and data were referred to TSCA for enforcement purposes.

On October 29, 1985, an amended complaint by U.S. EPA was filed against the Standard Scrap Metal facility. The amended complaint levied a $30,000 penalty for violations of Section 16(a) of the Toxic Substances Control Act (TSCA). In February, 1987, the facility appealed the decision and the complaint was dismissed because U.S. EPA could not prove that the PCBs had been accepted at the Site after 1978; however, U.S. EPA appealed the dismissal and the decision was reversed, and the $30,000 fine was levied against the facility. Standard Scrap filed for bankruptcy and the fine was never collected.

In 1989 the name of the facility was changed again to Chicago International Exporting with the presidents Steve Cohen and Bud Cohen actively managing the metals recycling business. The business is still active in reclaiming copper and other scrap steel from electric motors.

On September 22, 1992, IEPA was tasked to conduct a CERCLIS Screening Site Inspection (SSI) of the site. The SSI was conducted on November 4 and 5, 1992, and consisted of the collection of twelve soil samples. The analytical results from on-site soil sampling indicated PCBs up to 670 ppm.
Mr. Robert E. O'Hara from the IEPA referred the CIE site to the U.S. EPA, Emergency and Enforcement Response Branch requesting that the Region consider removal action at the site. The IEPA

has been kept informed as to all U.S. EPA involvement at the site.

On February 22, 1994, the U.S. EPA performed a Removal Site Assessment at the Chicago International Exporting site. The facility and buildings were found to be in the same condition as in the previous inspections. The south boundary of the site is located adjacent to a residential area within a highly populated area on the south side of Chicago. There are residences within 100 feet of the boundary on the South and the site is bounded by railroad tracks on the East and North and by the Heatbath Corporation on the West.

During the inspection, it was confirmed that the shredding of electric motors and reclamation of copper were the primary operations at the business. The owners and operators, Mr. Bud Cohen and Mr. Steve Cohen, were contacted by the OSC and verbal approval was given to access the site. The facility is still split up into two yards. The East Lot is where the electric motors are shredded and the copper, scrap, and fluff are separated. The shredded metallic material is separated from the non-metallic in the main building located in the east yard. The shredding operations generate large amounts of dust during grinding of the electric motors. The owner, Bud Cohen, stated that he shut down the unit during the inspection so that the dust would not impact our sampling efforts or health. The metallic material is then hauled into the main processing building where the copper is separated from the steel and other debris with a air forced cyclone separator. The dust from this operation is directly vented out the window onto the sidewalk and street of neighboring residences with no dust or pollution control. The OSC has referred this Air Compliance issue to the State IEPA and Cook County Air Board and City of Chicago.

To characterize the hazardous substances reported from earlier investigations, the U.S. EPA collected ten soil samples and analyzed them for total metals, TCLP metals, PCBs, Volatile Organic Compounds, Base Neutral Acids, and Dioxin. During the assessment, burning of wood and other debris was observed in the East Yard and wire was being burned in barrels in the West Lot. When the metal shredding and separation systems were operating, a continuous release of dust was observed migrating toward the neighboring residences. The soil and debris, and reclaimed copper and metal were all observed to be coated with oil and large oil stains were observed in both the East and West Lots. Broken ceramic terminal posts from capacitors and transformers were observed in the West Yard.

The area directly underneath the shredding operations is concrete, although a large part of the yard is not paved. Waste fluff and debris and ash piles are found in the North part of the yard where the wire incinerator and building were demolished. A foundation remains from a demolished building, as does debris

from the smoke stack from the incinerator. Two aluminum furnaces remain in the Southern Portion of the Yard.

The analytical information has confirmed that the soil and debris found on site are hazardous wastes by RCRA definition. Nine of Ten samples collected were above RCRA regulatory levels for lead and two of the samples were above RCRA regulatory levels for cadmium. This data confirms that RCRA hazardous wastes are found on site in soils, fluff piles, and scrap.

In addition, high PCB levels were detected in nine of the ten samples above the TSCA regulatory levels of 50 ppm. The current reclamation of electric motors causes PCBs to release when the motors are shredded and reclaimed at the facility. The PCBs come from the electrical capacitors within the motors which contain pure PCB. When the motors are shredded in the hammer mill, the PCBs release and soak the copper and metal scrap and the non-metallic fluff. The samples ranged from 61 ppm to 2,000 ppm, confirming the three previous inspections by TSCA, IEPA and TAT. Total metals values for lead, copper, zinc, and chromium were detected above health risk values creating a high potential for ingestion and inhalation of airborne dust by neighboring residences, the public entering the site, and by CIE employees.

Dioxins and Furans were detected in four samples with two of those samples containing levels above the 1 ppb 2,3,7,8 Total Equivalency Factor risk based level. The Dioxins and Furans were resultant of burning PCB transformers and Capacitors as reported to the IEPA by a Heatbath Employee in February 1984. In addition, the burning of wire casings has been documented to create incomplete products of combustion, including Dioxins and Furans which are deposited in the air and into the ash.

III. THREATS TO PUBLIC HEALTH OR WELFARE OR THE ENVIRONMENT

The conditions present at the Site constitute a threat to public health, welfare, or the environment based upon the factors set forth in Section 300.415(b)(2) of the National Oil and Hazardous Substances Pollution Contingency Plan, as amended ("NCP"), 40 CFR Part 300. These factors include, but are not limited to, the following:

1) Actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances, pollutants or contaminants;

This factor is present at the Site due to the existence of high levels of PCBs, Lead, Cadmium and Dioxin that are present at the surface and in subsurface soils. The soil is a hazardous waste, as defined by RCRA. Analytical results have confirmed TCLP metals, cadmium at 1.3 micrograms per liter ("mg/l"), and lead at 71 mg/l. The RCRA limits for cadmium and lead are 1.0 and 5.0

mg/l, respectively. Total PCBs were detected in on-site soils at 2,000 ppm. The TSCA regulatory level for PCBs is 50 ppm. The PCBs can be directly associated with past scrapping and burning of transformers and oil at the Site as reported by a Heatbath employee, and a former railroad employee. The current practice of shredding electric motors causes releases of PCBs from the electrical capacitors inside the motors. The Agency for Toxic Substances and Disease Registry ("ATSDR") considers 1 ug/kg (2,3,7,8-TCDD equivalence) of dioxin in soil to be a level of concern in residential areas. Sample results from on-site soils have confirmed dioxin levels of 4.004 ug/kg (2,3,7,8 -TCDD equivalence). The proximity to residences and the observed releases of dust and smoke from the burning of wire and debris present a direct contact threat to humans from these hazardous substances. In addition, the threat of direct human contact to hazardous substances to the public dropping off scrap and the CIE workers is evident.

2) High levels of hazardous substances or pollutants or contaminants in soils largely at or near the surface, that may migrate;

This factor is present at the Site due to the existence of high levels of heavy metals that are above RCRA limits for cadmium and lead, and high levels of copper, lead, chromium, and zinc which are released in the dust blowing off site and when the shredding and separation operation are in use. High levels of PCBs in the soils and in the non-metallic "fluff" migrate via airborne dust and during the shredding and separation operations. In addition, the soils contain dioxins that are greater than health based levels of 1 ug/kg. The migration of contaminants from the facility is possible from the dust generated from the shredding and separation equipment, and from wind blown dusts. The shredding and separation operations generate contaminated dust which can migrate off-site into residential yards and gardens. Observed releases of contaminated dust from the operations were noted during U.S. EPA's site inspection. In addition, migration of contaminated run-off caused by rain could aid in migration of contamination to nearby residential areas.

3) Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released;

This factor is present at the Site due to the existence of high levels of lead, cadmium, PCBs and dioxin found on site which can migrate with surface run off. In addition, the dry and windy weather causes contaminated soil, and non-metallic fluff to release to the neighboring residences via dust blown particles.

4) The unavailability of other appropriate federal or state response mechanisms to respond to the release;

This factor is supported by the removal actions required by this Action Memorandum and as noted by the referral of the site by the IEPA and the City of Chicago.

5) Other situations or factors that may pose threats to public health or welfare or the environment;

This factor is present at the Site due to the existence of observed releases of contaminated dust from the shredding and separation of electrical motor components. These components often contain PCBs, and high levels of heavy metals. The facility had no pollution control equipment on the shredding and separation equipment and at the time of the inspection contaminated dust was observed releasing directly to the sidewalk, street and residences via a duct that leads through the window.

IV. ENDANGERMENT DETERMINATION

Given the site conditions, the nature of the hazardous substances on site, and the potential exposure pathways to nearby populations described in Sections II and III above, actual or threatened releases of hazardous substances from this site, if not addressed by implementing the response actions selected in this Action Memorandum, may present an imminent and substantial endangerment to public health, or welfare, or the environment.

The presence of RCRA Hazardous Wastes, Lead(D008), Cadmium (D006), and PCBs above TSCA regulated levels and above EPA Spill Policy Criteria, and Dioxins and Furans above U.S. EPA and ATSDR residential health levels, which are present in high concentrations in the surface soils, represents an imminent and substantial endangerment to local residents. The observed release of contaminated dust to the residents from shredding and separation operations indicates a strong potential for direct human contact to the hazardous substances identified at the site.

V. EXEMPTION FROM STATUTORY LIMITS

Conditions at the CIE site meet the CERCLA section 104(c) Emergency Exemption which justify the need for a Twelve month and $2 Million dollar exemption. These conditions are;

1. There is an immediate risk to public health or welfare or the environment. This factor is present as documented during the U.S. EPA's site inspection where observed releases of dust contaminated with PCBs, Lead, Cadmium, and Dioxin where noted. The release of contaminated dust to the neighboring residences is on going and continuous during the shredding and separation operations. The proximity of residences to high levels of PCB's Lead and Cadmium and Dioxin found at the site pose an immediate risk to

neighboring residents.

2. Continued response actions are immediately required to prevent, limit, or mitigate an emergency. This criteria is present at the site as documented during the site inspection and in Section III "Threats". An estimated 8,000 cubic yards of contaminated soil must be excavated and removed to eliminate risk of ingestion by neighborhood children and adults. Installation of dust control equipment and/or discontinuation of the shredding and separation operations must be implemented immediately to prevent the continuous release of contaminated dust to the neighboring residences.

3. Assistance will not otherwise be provided on a timely basis. This exemption criteria is present and documented by the IEPA letter from Mr. Robert O'Hara requesting U.S. EPA assistance to conduct an emergency removal at the CIE site. Neither the IEPA nor Cook County or The City of Chicago have access to or resources to conduct a clean-up action at the site. The PRP is not financially viable and will be unable to conduct the appropriate removal action.

VI. PROPOSED ACTIONS AND ESTIMATED COSTS

The removal action shall include the following response activities:

a. Implement a sampling plan and characterize all waste for disposal of all hazardous wastes or hazardous substances identified at the facility. This Plan shall include an Extent of Contamination Study of the east and west lots, including soil borings beneath the cement pads. In addition, a Quality Assurance/Quality Control Project Sampling Plan and Health and Safety Plan shall be prepared prior to conducting any removal actions. Sampling will be conducted at neighboring residences to assess if polychlorinated biphenyls (PCBs), lead, cadmium, dioxin or other hazardous substances are above U.S. EPA residential health standards of 500 ppm for lead, 160 ppm Cadmium in the two yards and 40 ppm for Cadmium in residential yards, 10ppm for PCB's, and 1 ppb for 2,3,7,8 TCDD Equivalency Factors.

b. Secure the Site by locking and securing the gate and fence and by allowing only authorized access to the east and west lots during operating hours.

c. Implement dust control procedures across the whole site including installation of equipment to eliminate fugitive dust emissions from the Site. Specifically, to eliminate dust and emissions from the electric motor

shredding and separation operation, and the copper recovery system inside the main building. Conduct air monitoring for PCBs, lead, and cadmium using high volume air sampling devices to assess if any fugitive dust emissions are exiting the Site into the neighboring residential yards.

d. Eliminate burning or incineration of material in drums, pits, or other unregulated open containers or areas.

e. Restrict access to contaminated areas by employees, truck drivers, and to the public. Post warning signs of contaminated areas, and provide workers with all appropriate right to know information regarding the contaminants found on site.

f. Treat and/or dispose of all contaminated soils at a Resource Conservation and Recovery Act (RCRA)/Toxic Substances Control act (TSCA) approved disposal facility. Contaminated soils include all soils with concentrations of PCBs which exceed 50 parts per million (ppm), and/or concentrations of lead which exceed 5 milligrams per liter (mg/l) Toxicity Characteristic Leaching Procedure (TCLP), concentrations of cadmium which exceed 1 mg/l TCLP, dioxin which exceeds 1 part per billion (ppb) 2,3,7,8 TCDD total equivalency factor, and/or concentrations of any other hazardous substance found on Site which exceeds the applicable Federal clean-up standards.

g. Remove and dispose of the concrete pads and underlying soils if sampling confirms contamination above clean-up standards as described in Section f. above.

h. Decontaminate and/or dispose of scrap metal, concrete or debris contaminated above clean-up standards as described in the PCB Spill Clean-up Policy.

i. Conduct confirmation sampling to document that all appropriate U.S. EPA clean-up standards have been met. Due to the proximity to residences and observed releases at the site, the residential clean-up standards shall apply. The risk based clean-up standards for the site shall be 500 ppm total lead, 160 ppm total cadmium in the CIE yards and 40 ppm in the residential yards, 10ppm PCB's, and 1 ppb 2,3,7,8 TCDD equivalency factor.

All applicable or relevant and appropriate requirements (ARARs) of Federal law will be complied with to the extent practicable. A letter has been sent to the IEPA requesting that it identify State ARARs. Any State ARARs identified in a timely manner for

this removal action will be complied with to the extent practicable.

The *On-Scene Coordinator* has begun planning for provision of post removal site control, consistent with the provisions of Section 300.415(k) of the NCP. No post removal site control is expected given the above mentioned proposed removal action.

The response actions described in this memorandum directly address actual or threatened releases of hazardous substances, pollutants or contaminants at the facility which may pose an imminent and substantial endangerment to public health and safety, and to the environment. These response actions do not impose a burden on affected property disproportionate to the extent to which that property contributes to the conditions being addressed.

ESTIMATED COSTS

EXTRAMURAL COSTS:

Clean-up Contractors Costs(ERCS)	$ 2,707,000
25% contingency	$ 676,750
Subtotal	$ 3,383,750
Total TAT, including multiplier costs	$ 100,000
Extramural Subtotal	$ 3,483,750
Extramural Contingency 25%	$ 870,000
TOTAL EXTRAMURAL COSTS:	$ 4,353,750

INTRAMURAL COSTS

Intramural Direct Costs (1440 hrs x 30/hour + 150 HQ HRS.)	$ 50,000
Intramural Indirect Costs (1440 hrs x 65/hour)	$ 93,600
TOTAL INTRAMURAL COSTS	$ 143,600
TOTAL, REMOVAL PROJECT CEILING	$ 4,497,350

VII. EXPECTED CHANGE IN THE SITUATION SHOULD ACTION BE DELAYED OR NOT TAKEN

Immediate action is required at the CIE site due to the on-going release of contaminated dust to the neighboring residences. Contaminants found at the site can migrate to the residential area adjacent to the site via wind blown dust and from the shredding and separation operations, posing a direct human exposure threat. Delayed action will increase public health risks to the adjacent population through prolonged exposure to airborne contaminants.

VIII. OUTSTANDING POLICY ISSUES

None

IX. ENFORCEMENT

For administrative purposes, information concerning the enforcement strategy for this site is contained in an Enforcement Confidential addendum.

X. RECOMMENDATION

This decision document represents the selected removal action for the Standard Scrap Metal/Chicago International Exporting site, in Chicago, Illinois, developed in accordance with CERCLA as amended, and is not inconsistent with the NCP. This decision is based on the Administrative Record for the site. Conditions at the site meet the NCP section 300.415 (b) (2) criteria for a removal and the CERCLA section 104(c) emergency exemption from the Twelve Month and $2 Million dollar statutory limitations and I recommend your approval of the proposed removal action and twelve month and $2 Million exemption. The total project ceiling, if approved will be $4,497,350. Of this, an estimated $4,253,750 may be used for cleanup contractor costs.

for Valdas V. Adamkus, Regional Administrator

APPROVE: _____ DATE: 9/22/94
Director, Waste Management Division

DISAPPROVE: _____ DATE: _____
Director, Waste Management Division

cc: E. Hulke, U.S EPA ERD 5202G
Don Henne, U.S. Dept. of Int.
Larry Eastep, IEPA

bcc: A. Baumann, HSRL-5J
D. Bruce, HSE-5J
R. Karl, HSE-5J
J. Cisneros, HSE-5J
L. Fabinski, ATSDR, HSRL-5J
O. Warnsley, CRS, HSRLT-5J
T. Lesser, P-19J
D. Crume, MF-10J
EERB Read file (L. Taylor)
EERB Delivery Order File (M.E. Gustafson)
EERB Site File (Earl Brenneman, WMD Records Center, 7th Floor)
Robert Dumelle/ Contracting Officer, MCC-10J
Steven J. Faryan, On-Scene Coordinator
Kurt Lindland, Attorney, ORC
Debbie Regel, Enforcement Specialist

ATTACHMENT A

INDEX TO ADMINISTRATIVE RECORD

DATE	AUTHOR	RECIPIENT	REPORT	PAGES
5/6/94	E & E	U.S. EPA	SITE ASSESSMENT REMOVAL ACTION PLAN	
	Faryan	V. Adamkus	Action Memo (Pending)	10
7/27/93	Faryan	Gary King IEPA	Letter requesting U.S. EPA Removal	2
9/25/94	Faryan	Larry Estep	Letter requesting ARAR's	2

PAGE 1

ATTACHMENT B

HAS BEEN REDACTED

NOT RELEVANT TO THE SELECTION OF THE REMOVAL ACTION

PAGE 2

ATTACHMENT B

HAS BEEN REDACTED

NOT RELEVANT TO THE SELECTION OF THE REMOVAL ACTION

ATTACHMENT C
DETAILED COST ESTIMATE

Contractor Personnel	$ 282,000
Contractor Equipment	$ 55,000
Unit Rate Materials	$ 116,000
Subcontractors	$ 1,300
Waste Transportation	$ 848,700
Waste Disposal	$1,404,000
Clean-up Contractor Total	$2,707,000